Federal/State/Local partnership forges ahead with river excavation

U.S. Environmental Protection Agency (EPA) Newsletter #3

Nashua River Asbestos Site September 1998

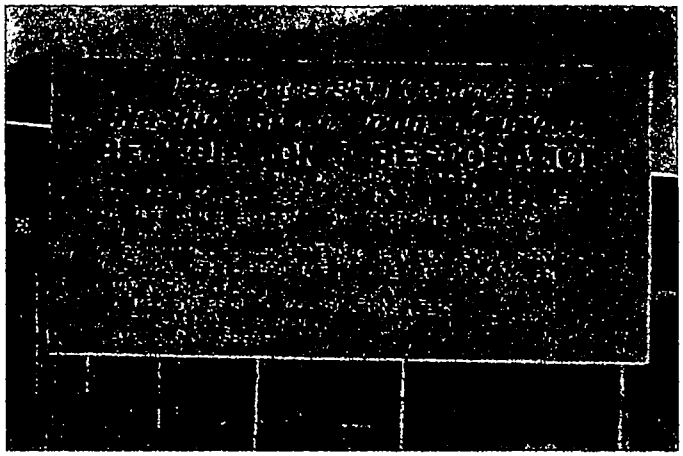
Overview

The Nashua River Asbestos Site is located behind the former Johns Manville Company facility at 40 Bridge Street along the southern shoreline of the Nashua River, between the railroad bridge and Merrimack River in Nashua, New Hampshire. The source of asbestos is located within sediments of the riverbed and shoreline,

Asbestos fibers clearly visible in the river sediments.

and extends approximately 800 feet downstream from the outfall pipe and 100 feet to the middle of the river channel.

The asbestos is attributed to wastewater discharged from the former Johns Manville Company facility. Beginning in the early 1900s, the company combined asbestos fibers with cement to produce domestic and industrial building materials. In December 1985, the company ceased production of asbestos-containing products at the site.



This sign was provided by the city of Nashua and is posted at the entrance to the site.

In the fall of 1997, EPA completed a cleanup of the Johns Manville facility, which resulted in the demolition of original manufacturing buildings. The EPA anticipates this Nashua River cleanup as the final phase of the project. EPA has allocated $3.1 million to adequately address contamination at the site.

Paul Groulx, EPA OSC, and Gary Lynn, NHDES Project Manager talk shop.

EPA cleanup team moves swiftly through first stages of excavation

As you may recall from our July 1998 newsletter entitled, "EPA to Begin River Excavation," EPA's discovery of coal tar mixed with asbestos in the river sediments substantially increased the amount of resources and planning required to adequately address contamination at the site.

As a result, EPA, working as a team with the city of Nashua, New Hampshire Department of Environmental Services (NHDES), New Hampshire Department of Health and Human Services, and the Army Corps of Engineers, developed a comprehensive excavation plan to improve environmental conditions at the site and protect public health.

This wastewater treatment plant handles 500 gallons per minute and runs 24 hours/day.

The EPA cleanup team officially started excavating the river sediments on Monday, September 21, 1998. Thus far, approximately 25% of the excavation work in the river and on the shoreline is complete. The goal of this work is to excavate sediments in the river that are contaminated with a mixture of asbestos and coal tar, and soils along 800 feet of shoreline containing only asbestos contamination.

The excavation work is proceeding very smoothly due to the fact that the river bed within the work area is mostly composed of bedrock. Essentially, the EPA team is removing the contaminated sediments from the river bed and then power washing the exposed bedrock. The resulting waste water containing coal tar and asbestos is pumped through a treatment facility on site and released back into the river.

These roll-offs will be used to transport waste from the site to Nashua City Landfill and a hazardous waste disposal facility in Quebec, Canada called Stablex, Inc.

Porta-Dam enables river bottom excavation

In preparation for the actual excavation of river sediments, the EPA team installed a porta dam extending 671 feet in the river. A 25-foot apron made of heavy duty plastic canvass just outside of the main dam barrier creates a pressure seal that keeps water from entering or escaping the excavation area.

Waste water from the excavation work is pumped to a treatment system located on the embankment above the river. This system handles 500 gallons/minute and is run 24 hours/day to maintain the integrity of the dam and keep water from infiltrating the excavation area.

This crane was used to lift selected trees from the river embankment to prepare for the excavation work.

The results speak for themselves!

In a working partnership with the city, the EPA team has arranged for the disposal of the asbestos

contaminated shoreline materials in the Nashua City Landfill.

Thus far, the EPA team has completed the

This criss-crossed iron skeleton is the foundation of the porta-dam, which allows the EPA team to keep the area free of water.

following tasks on its road to a successful completion of the cleanup project:

✔Removed selected trees and other vegetation from the riverbank area with a crane to access the area with heavy equipment.

✔Disposed of 2483 tons of materials containing asbestos in the Nashua Landfill; Shipped 280 tons of coal tar/asbestos contaminated sediments to Stablex Canada, Inc. in Quebec, Canada.

✔Constructed a staging area for roll-off containers

✔Built a ramp over the flood control dike to drive heavy equipment down to the river for the excavation work

✔Used 700 tons of stone to build an access road along the shoreline for the load out of asbestos and coal tar waste

✔Installed a 1200 foot silt/oil containment boom in the Nashua River

✔Set up a water treatment system, which is now fully operational

✔Installed 671 feet of porta dam to facilitate contaminated river sediment excavation

✔432 feet of shoreline river excavation is underway

The EPA team set up air monitoring stations on the perimeter of the site to measure air quality during excavation work.

The Partnership Task Force meets bimonthly at the site trailers to discuss site activities and maintain their ambitious work schedule to achieve cleanup goals. These meetings are attended by representatives of the EPA, the state, and city officials to keep everyone informed about the progress, current schedule and changing issues of the cleanup project.

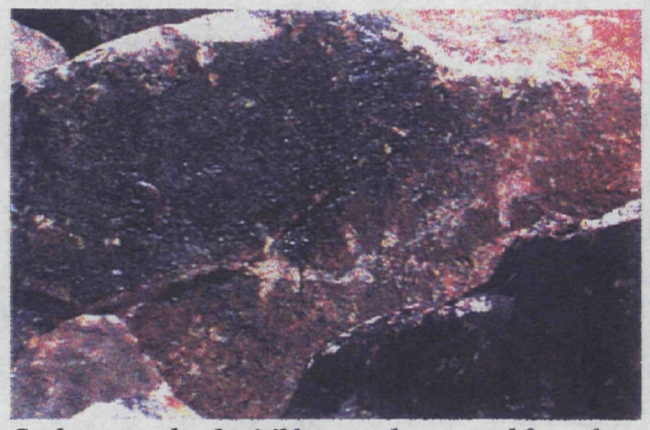
Air Monitoring

Air sampling stations set up on the perimeter of the site have shown no detectable levels of asbestos fibers during excavation work. The New Hampshire Department of Health and Human Services (DHHS) receives all air monitoring data on a daily basis for review. Please call Dennis Pinski of DHHS at (603) 271-4664 if you have any questions.

Next Steps

The EPA partnership team estimates that all excavation work in the river and along the shoreline will be complete by mid-October. The team will conduct restoration work at the same time, hoping to finish what they can by mid-November before winter sets in. Next spring (1999), the EPA restoration team will return to plant selected species that require an entire growing season to succeed before winter.

The crane placed 671 feet of porta dam into the river in preparation for excavation work.



Coal tar was clearly visible on rocks removed from the river. The EPA team will clean these rocks before placing them back into the river

All work vehicles leaving the site are sprayed down and their back ends covered to ensure that contaminated soils are not carried off of the site.

Please contact us if you have questions or concerns about this cleanup!!

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